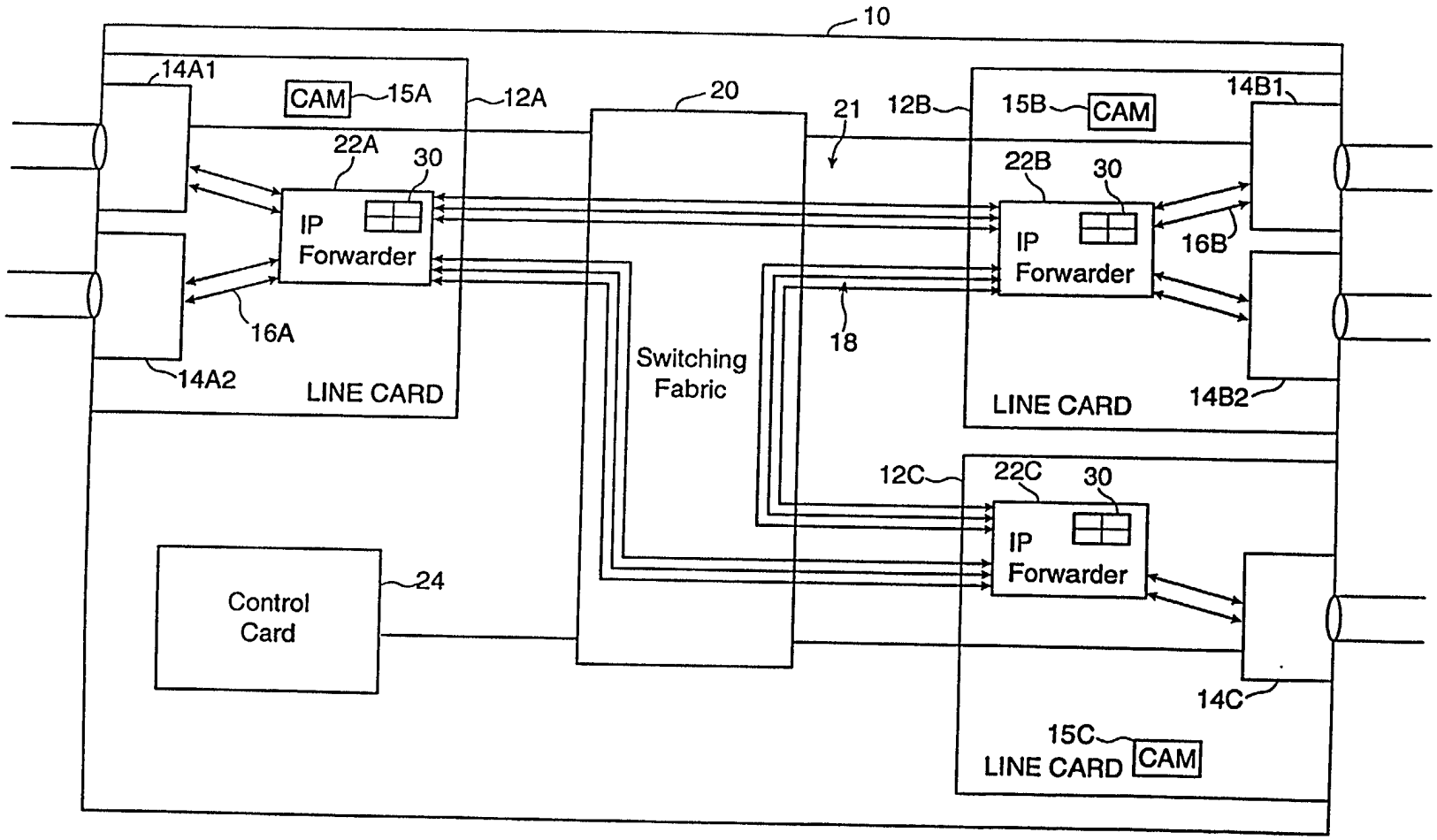

Figure 1

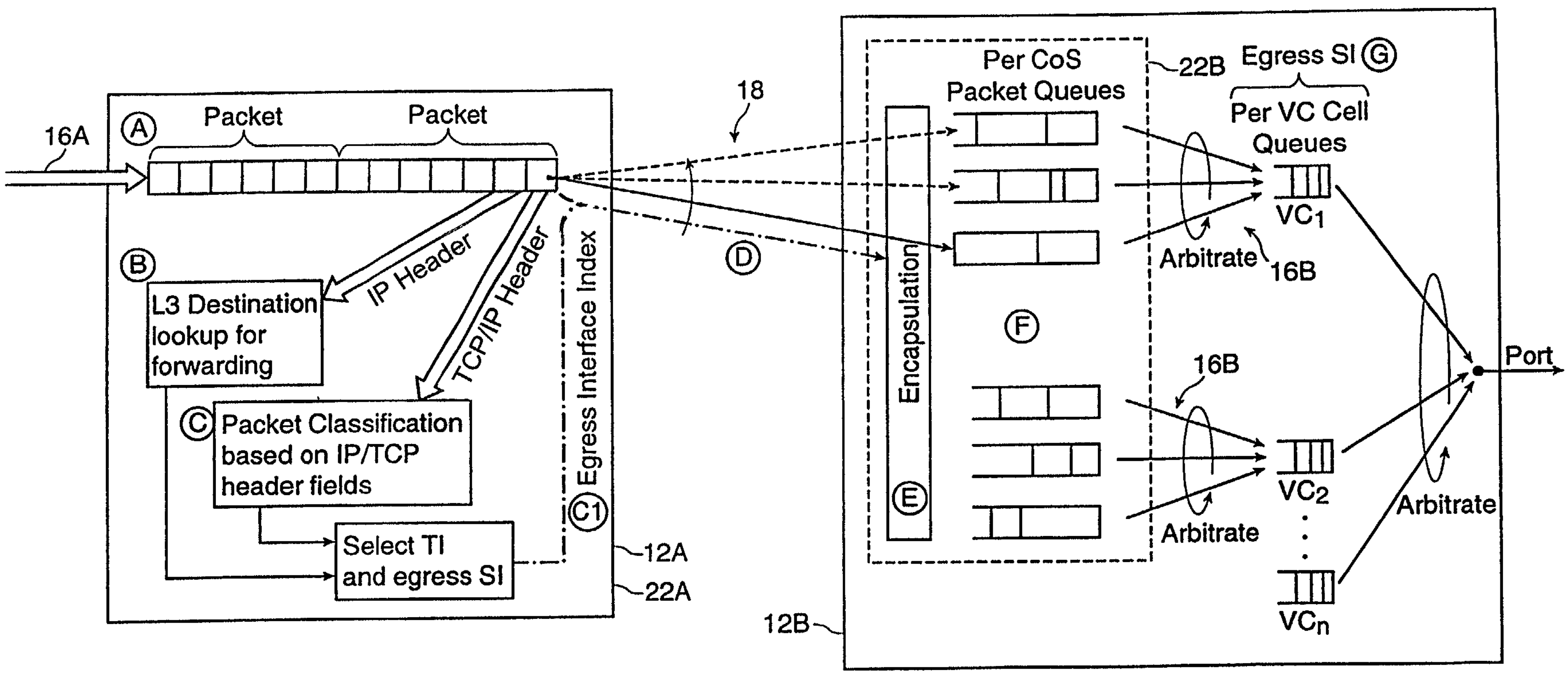
16A
A
Packet
Packet
B
L3 Destination lookup for forwarding
IP Header
TCP/IP Header
C
Packet Classification based on IP/TCP header fields
Select TI and egress SI
Egress Interface Index
C1
12A
22A
18
D
12B
Per CoS Packet Queues
22B
Encapsulation
E
F
Egress SI
G
Per VC Cell Queues
VC1
VC2
VCn
Arbitrate
16B
16B
Arbitrate
Arbitrate
Port

Figure 2

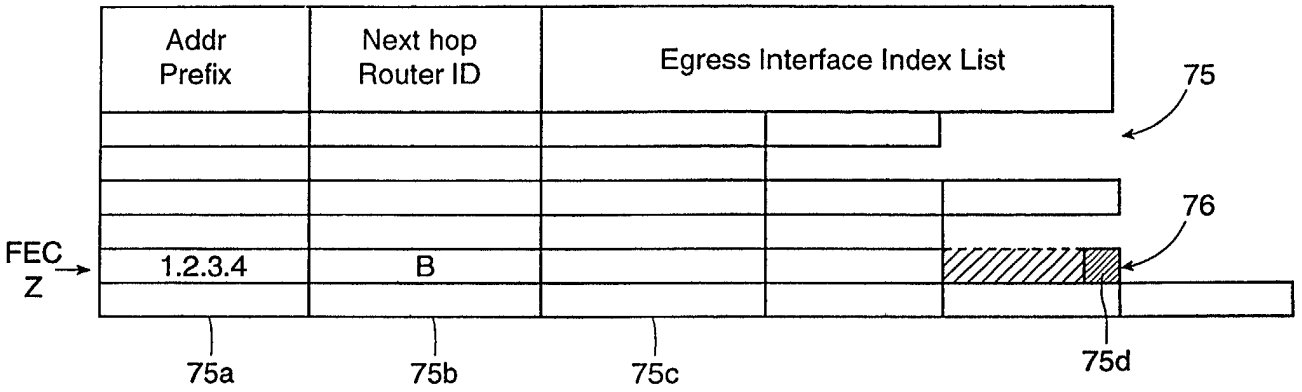

Figure 6

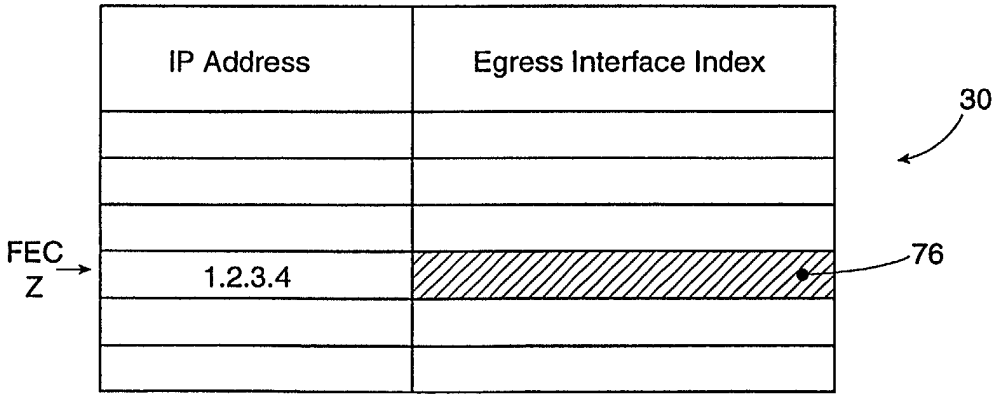

Figure 3

Fig. 4

Parameter	Description	Default	NMTI	SNMP	NCI	CLI
ID number	A identification number assigned for this SI; unique within a subslot. This value is internally assigned and cannot be changed. This is 5 digit number field.	None	R	-	-	-
Endpoint	The ATM endpoint (shelf-slot-subslot-port; VPI/VCI) used by the SI.	None	R/W	-	-	-
Name	Name of the SI. This is 16 character text string field	Empty	R/W	-	-	-
Application	Application(s) provided by this SI. This is a boolean vector (i.e. bit map) indicating whether each of forwarding, routing and LDP is enabled.	Forward	R/W	-	-	-
Address type	Type of the IP address field. Valid type supported are unnumbered and IPv4.	Un-numbered	R/W	-	-	-
IP address	The IP address of the service interface. Represented to the user in standard "dotted decimal" format. "Illegal" IP addresses (e.g. 0.0.0.0, 255.255.255.255) are blocked.	Un-assigned	R/W	-	-	-
IP address prefix length	Number of bits in the IP address which constitute the (sub)network ID. A number in the range of 0..32.	None	R/W	-	-	-
Neighbour address type	Type of the neighbour IP address field. Valid type supported are unnumbered and IPv4.	Un-numbered	R/W	-	-	-
Neighbour IP address	The IP address used at the termination of the SI at the neighbouring router. Represented to the user in standard "dotted decimal" format. "Illegal" IP addresses (e.g. 0.0.0.0, 255.255.255.255) are blocked.	Un-assigned	R/W	-	-	-
Encapsulation	Encapsulation used on the SI. (RFC1483 LLC/SNAP routed IP, RFC1483 NULL)	RFC1483 NULL	R/W	-	-	-
MTU	Maximum Transmission Unit.	2016 octets	R	-	-	-
Ingress traffic contracts	An ingress traffic contract structure consists of an action (disable, tag, discard), a committed information rate (in b/s) and a burst size (in bytes). Eight ingress traffic contract structures are contained in each SI; each applies to a CoS.	disable CIR 0 BS 0	R/W	-	-	-
Status	Status of the service interface. (Up, Down).	Down	R	-	-	-

Service Interface Parameters

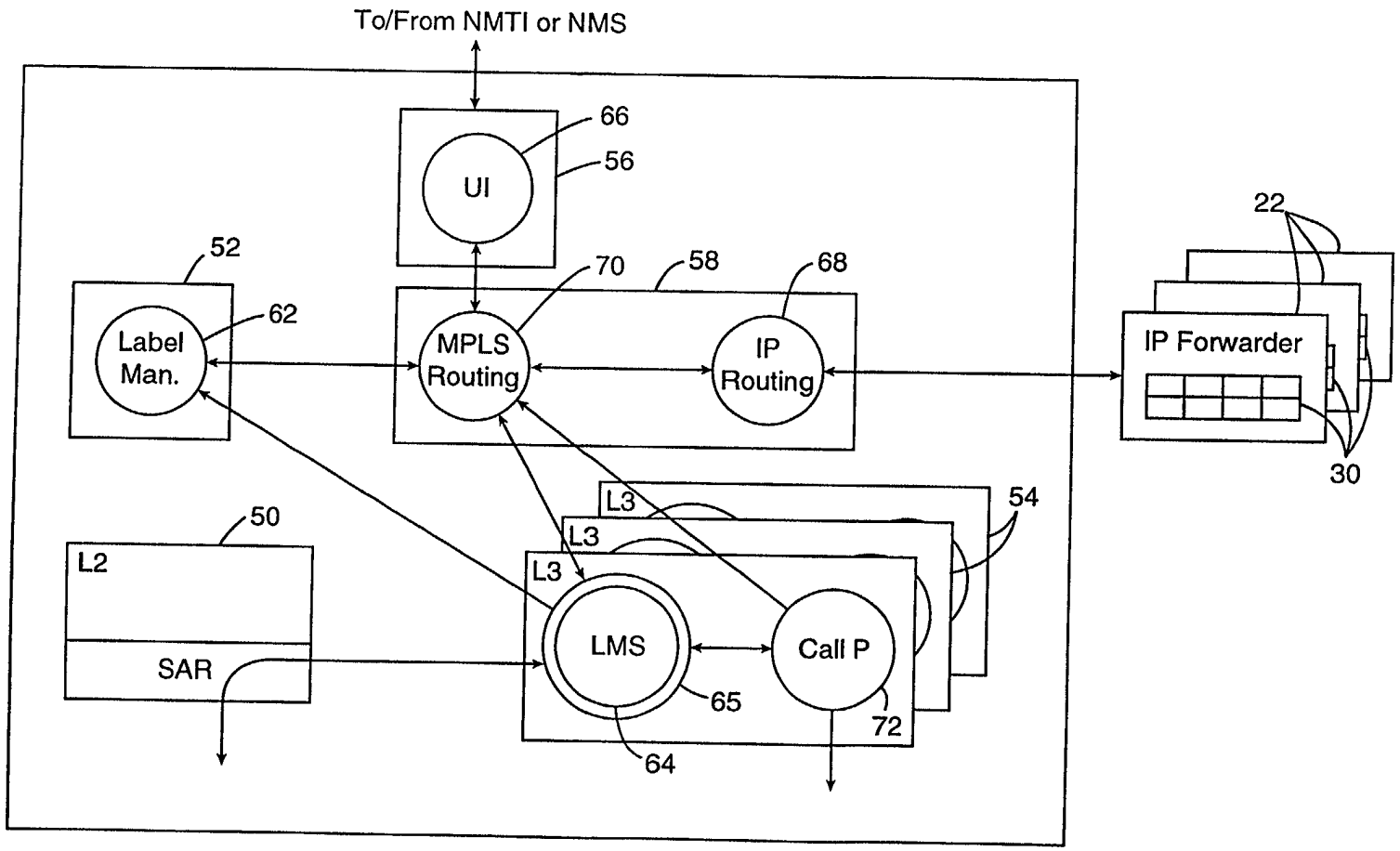

Figure 5

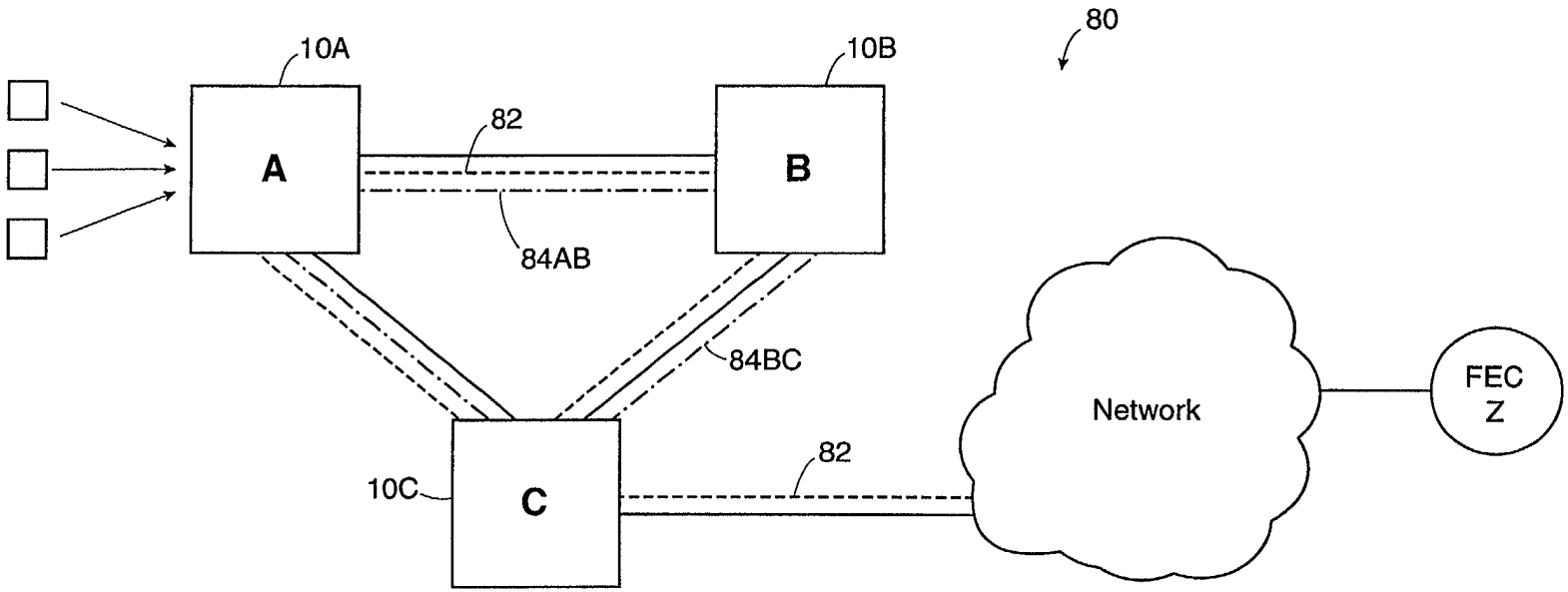

Figure 7

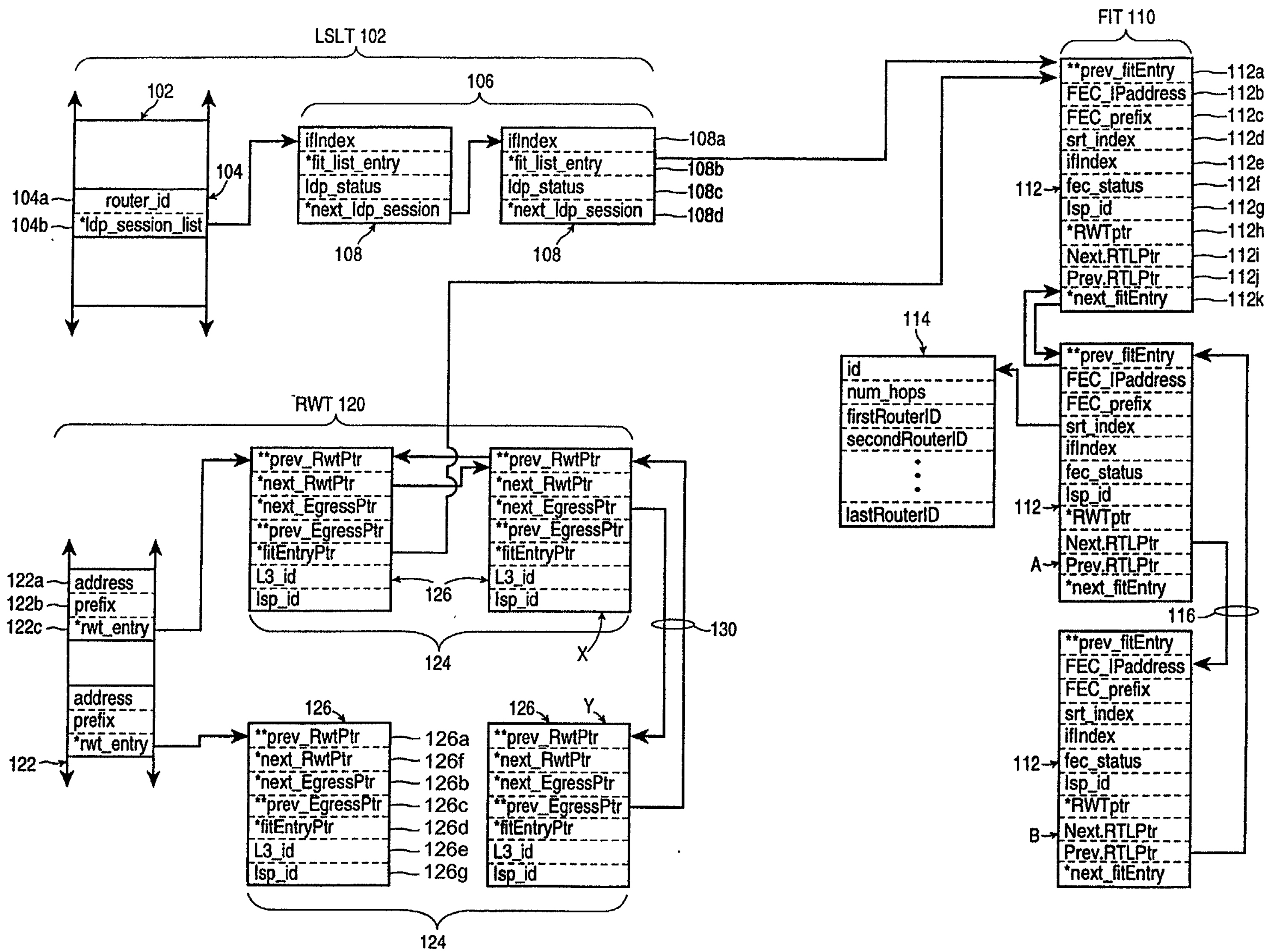
LSLT 102
102
104
104a
104b
router_id
*ldp_session_list
106
ifIndex
*fit_list_entry
ldp_status
*next_ldp_session
108
108a
108b
108c
108d
FIT 110
**prev_fitEntry
FEC_IPaddress
FEC_prefix
srt_index
ifIndex
fec_status
lsp_id
*RWTptr
Next.RTLPtr
Prev.RTLPtr
*next_fitEntry
112
112a
112b
112c
112d
112e
112f
112g
112h
112i
112j
112k
114
id
num_hops
firstRouterID
secondRouterID
lastRouterID
A
B
116
RWT 120
122
122a
122b
122c
address
prefix
*rwt_entry
**prev_RwtPtr
*next_RwtPtr
*next_EgressPtr
**prev_EgressPtr
*fitEntryPtr
L3_id
lsp_id
124
126
126a
126f
126b
126c
126d
126e
126g
130
X
Y

Figure 8

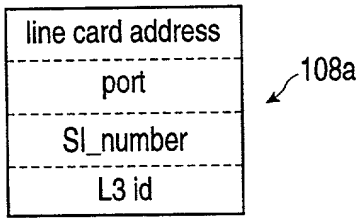

Figure 8A

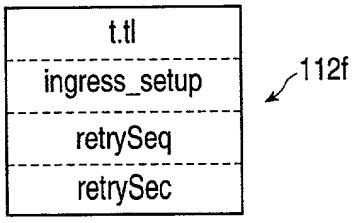

Figure 8B

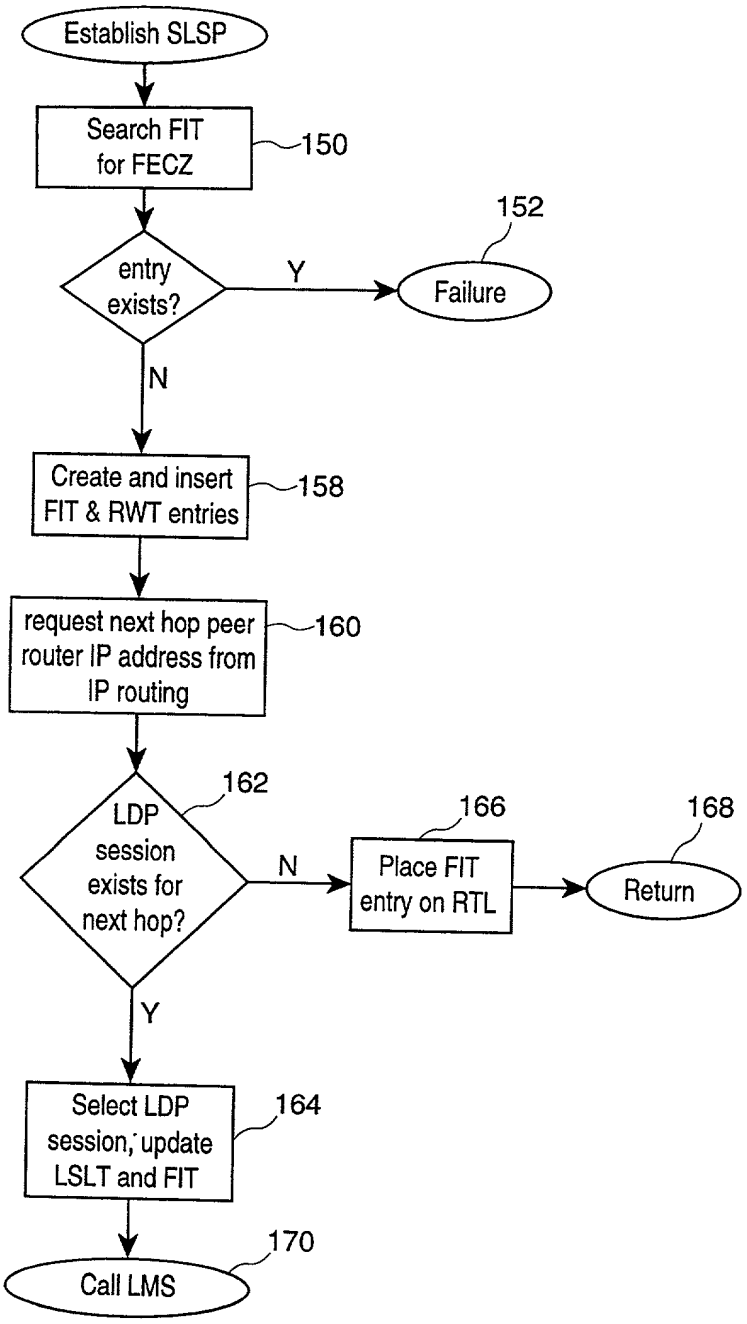
Establish SLSP
Search FIT for FECZ
150
entry exists?
Y
152
Failure
N
Create and insert FIT & RWT entries
158
request next hop peer router IP address from IP routing
160
LDP session exists for next hop?
162
N
166
Place FIT entry on RTL
168
Return
Y
Select LDP session, update LSLT and FIT
164
Call LMS
170

Figure 9

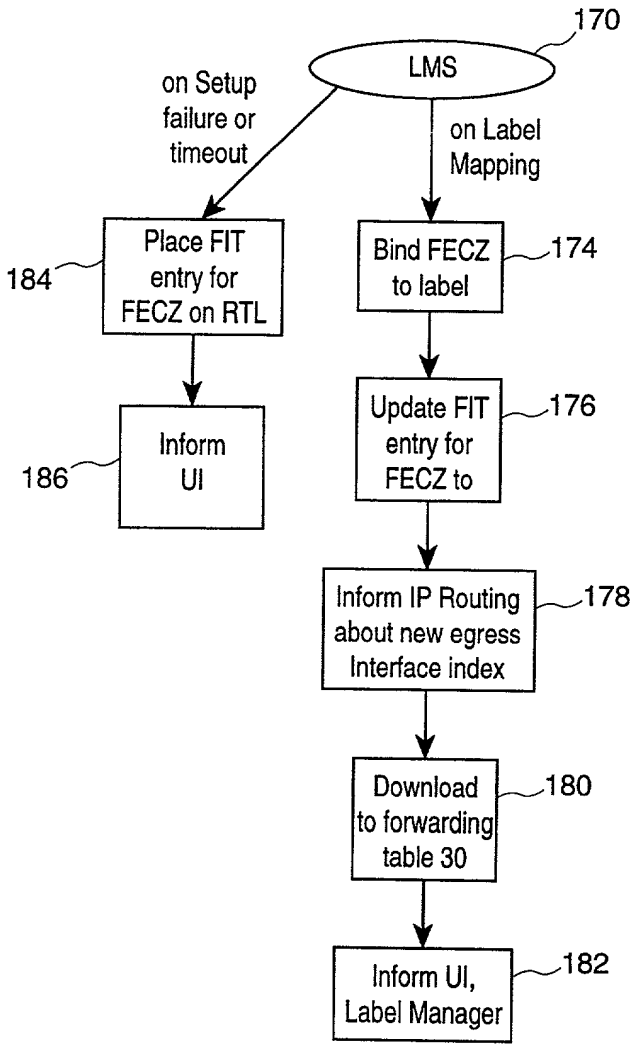
170
LMS
on Setup failure or timeout
on Label Mapping
184
Place FIT entry for FECZ on RTL
Bind FECZ to label
174
Update FIT entry for FECZ to
176
186
Inform UI
Inform IP Routing about new egress Interface index
178
Download to forwarding table 30
180
Inform UI, Label Manager
182

Figure 10

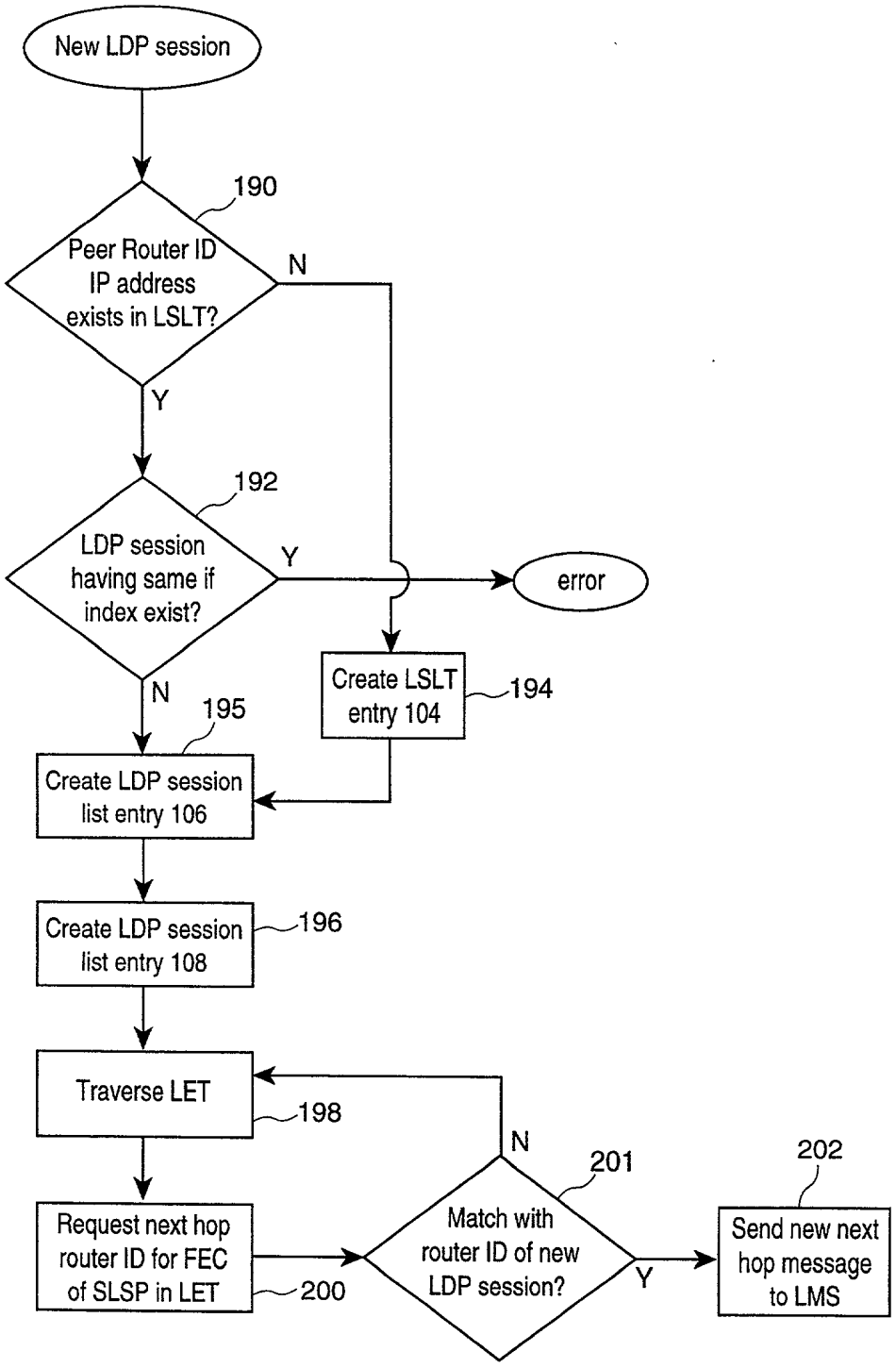
New LDP session
190
Peer Router ID IP address exists in LSLT?
N
Y
192
LDP session having same if index exist?
Y
error
N
Create LSLT entry 104
194
195
Create LDP session list entry 106
Create LDP session list entry 108
196
Traverse LET
198
N
201
202
Request next hop router ID for FEC of SLSP in LET
200
Match with router ID of new LDP session?
Y
Send new next hop message to LMS

Figure 11